CLAIMS

What is claimed is:

1. A method for controlling fuel consumption in a vehicle engine, comprising:

varying charge dilution in an intake manifold of the engine; and

maintaining a pressure in the intake manifold within a predetermined range using said varying step.

2. The method of claim 1 further comprising predetermining said range to reduce pumping work by at least one engine cylinder.

3. The method of claim 1 wherein said varying charge dilution step comprises increasing charge dilution until said intake manifold pressure reaches said predetermined range.

4. The method of claim 1 wherein said varying charge dilution step comprises varying air delivery to the intake manifold.

5. The method of claim 4 wherein said varying air delivery step comprises one of opening and closing a throttle of the vehicle.

6. The method of claim 1 further comprising increasing fuel to the intake manifold in accordance with a request for additional torque.

7. The method of claim 1 wherein said varying charge dilution step comprises varying exhaust gas to the intake manifold.

8. The method of claim 7 further comprising decreasing said exhaust gas and increasing air and fuel to the manifold in accordance with a request for additional torque.

9. A method for controlling fuel consumption in a variable displacement engine, comprising:

deactivating at least one cylinder; and

varying charge dilution in an intake manifold of the vehicle to reduce pumping work by at least one activated cylinder.

10. The method of claim 9 wherein said varying charge dilution step comprises increasing charge dilution until a predetermined intake manifold pressure is reached.

11. The method of claim 9 wherein said varying charge dilution step comprises varying air delivery to the intake manifold.

12. The method of claim 11 wherein said varying air delivery step comprises opening or closing a throttle of the vehicle.

13. The method of claim 9 further comprising increasing fuel to the intake manifold in accordance with a request for additional torque.

14. The method of claim 9 wherein said varying charge dilution step comprises varying exhaust gas to the intake manifold.

15. The method of claim 14 further comprising decreasing said exhaust gas and increasing air and fuel to the manifold in accordance with a request for additional torque.

16. A vehicle engine control system comprising:

an intake manifold through which fuel and air are delivered to at least one cylinder of the engine; and

a controller that varies charge dilution in said intake manifold to maintain a pressure in said intake manifold within a predetermined range.

17. The control system of claim 16 wherein said range is predetermined to reduce pumping work by at least one said cylinder.

18. The control system of claim 16 further comprising an exhaust manifold that receives exhaust gas from the engine, wherein said controller varies charge dilution in said intake manifold by varying exhaust gas to said intake manifold.

19. The control system of claim 16 further comprising a throttle that controls air delivery to said intake manifold, wherein said controller one of opens and closes said throttle to vary said charge dilution.